

Title (en)
CERAMIC FILTER

Title (de)
KERAMISCHER FILTER

Title (fr)
FILTRE CÉRAMIQUE

Publication
EP 2045001 A4 20110504 (EN)

Application
EP 07768407 A 20070706

Priority
• JP 2007063938 W 20070706
• JP 2006198250 A 20060720
• JP 2006298552 A 20061102

Abstract (en)
[origin: US2008105613A1] There is provided a ceramic filter formed on a porous base material and having satisfactory transmission amount and selectivity. The ceramic filter has a first surface dense layer 3 having an average pore diameter of 0.1 to 3 µm on an alumina porous base material 2 having an average pore diameter of 1 to 30 µm, a second surface dense layer 4 having an average pore diameter of 0.01 to 0.5 µm on the first surface dense layer 3, and a third surface dense layer 5 made of a titania sol and having an average pore diameter of 0.3 to 20 nm on the second surface dense layer 4. Moreover, on the third surface dense layer 5, a carbon membrane layer 6 as a molecular sieve carbon membrane is formed.

IPC 8 full level
B01D 71/02 (2006.01); **B01D 61/36** (2006.01); **C04B 38/00** (2006.01)

CPC (source: EP US)
B01D 63/066 (2013.01 - EP US); **B01D 67/0067** (2013.01 - EP US); **B01D 69/12** (2013.01 - EP US); **B01D 71/021** (2013.01 - EP US); **C04B 35/10** (2013.01 - EP US); **C04B 35/52** (2013.01 - EP US); **C04B 38/0032** (2013.01 - EP US); **B01D 2325/0233** (2022.08 - EP US); **B01D 2325/0283** (2022.08 - EP US); **B01D 2325/20** (2013.01 - EP US); **C04B 2111/00405** (2013.01 - EP US); **C04B 2111/00801** (2013.01 - EP US)

C-Set (source: EP US)
C04B 38/0032 + **C04B 35/52**

Citation (search report)
• [XY] WO 0053299 A1 20000914 - DU PONT [US], et al
• [Y] US 2004182242 A1 20040923 - MITANI HIROYUKI [JP], et al
• [I] JP 2002066280 A 20020305 - KYOCERA CORP
• See also references of WO 2008010452A1

Cited by
WO2012041999A1; WO2012041998A1; US8608837B2; US8608828B2; EP3037157A2; DE102014118892A1; US9962648B2

Designated contracting state (EPC)
DE ES FI FR PL SE

DOCDB simple family (publication)
US 2008105613 A1 20080508; AU 2007263408 A1 20080228; AU 2007263408 A2 20080424; AU 2007263408 B2 20110825; BR PI0702895 A2 20110315; CA 2615643 A1 20080124; CA 2615643 C 20130625; CN 101351263 A 20090121; CN 101351263 B 20120905; EP 2045001 A1 20090408; EP 2045001 A4 20110504; EP 2045001 B1 20180228; JP WO2008010452 A1 20091217; WO 2008010452 A1 20080124

DOCDB simple family (application)
US 96612207 A 20071228; AU 2007263408 A 20070706; BR PI0702895 A 20070706; CA 2615643 A 20070706; CN 200780001018 A 20070706; EP 07768407 A 20070706; JP 2007063938 W 20070706; JP 2007558387 A 20070706